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## **REMARKS**

This response is intended as a full and complete response to the non-final Office Action mailed December 9, 2004. In the Office Action, the Examiner notes that claims 1-41 are pending of which claims 1-18 and 32-40 are withdrawn from consideration and claims 19-31 are rejected. In view of the following discussion, the Applicants submit that none of the claims now pending in the Application are obvious under the provisions of 35 U.S.C. § 103.

### **REJECTIONS**

35 U.S.C. §103

### **Claims 19-31**

The Examiner has rejected claims 19-31 under 35 U.S.C. §103(a) as being unpatentable over Ahuja et al. (U.S. 6,175,869, hereinafter "Ahuja"). The Applicants respectfully traverse the rejection.

More specifically, the Examiner asserts that Ahuja teaches selecting one of the retrieved addresses based on a preference number associated with each retrieved address. Although the Examiner correctly concedes that Ahuja does not teach storing a preference number associated with each mapped address in the database, the Examiner further asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the preference numbers as taught in Applicants' invention in the system disclosed in Ahuja. (Office Action, Page 3, Items 4-5). The Applicants respectfully disagree.

In general, Ahuja teaches client-side techniques for processing client requests to access a network service hosted by a pool of servers. As described in Ahuja, a client agent associated with the requesting client uses end-to-end response times associated with previous client requests in order to respond to current client requests. (Ahuja, Summary). Nowhere in Ahuja, however, is there any teaching, showing, or suggestion of "retrieving from a preference table a preference number associated with each retrieved mapped address" and "selecting one of the retrieved mapped addresses

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<u>based on the retrieved preference numbers</u>". Specifically, Applicants' independent claims 19 and 26 recite:

- 19. A computer program product having a computer readable medium having computer program logic recorded thereon for mapping an input name into an address upon a request from a requester, the computer program product comprising:
- (a) a receiving program code segment for causing a computer to receive the input name from the request;
- (b) a mapping program code segment for causing the computer to map the input name against a mapping database for mapping a name to an address wherein at least one name is mapped to more than one address, the mapping program code segment also for causing the computer to retrieve from the mapping database all addresses mapped to the input name;
- (c) a selecting program code segment for causing the computer to retrieve a preference number from a preference database associated with each retrieved mapped address and the input name, each entry of the preference database comprising an address, a requester identifier, and a preference number, wherein the requester is identified by the requester identifier and at least one requester identifier is listed in more than one entry, the selecting program code segment also for causing the computer to select one of the retrieved mapped addresses based on the retrieved preference numbers; and
- (d) a returning program code segment for causing the computer to return to the requester a response comprising the selected retrieved mapped address.
- 26. A method for mapping an input name into an address upon request from a requester, the method comprising the steps of:
- (a) retrieving from a mapping table all addresses mapped to the input name, each entry in the mapping table mapping a name to an address wherein at least one name is mapped to more than one address;
- (b) retrieving from a preference table a preference number associated with each retrieved mapped address and the input name, each entry of the preference table comprising an address, a requester identifier, and a preference number, wherein at least one requester identifier is listed in more than one entry;
- (c) <u>selecting one of the retrieved mapped addresses based on the retrieved</u> preference numbers; and
- (d) returning a response comprising the selected address. [Emphasis added.]

In general, Applicants' invention discloses selecting a best content delivery server by receiving a name from a requesting client and selecting one of the addresses mapped to that name. In particular, the Applicants' invention discloses a preference database for storing preference numbers associated with the addresses mapped to the

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requested name, where selection of one of the addresses mapped to the requested name is performed based on the preference numbers.

The computation and use of end-to-end response times associated with previous client requests in order to respond to a current client request, as taught in Ahuja, is simply not the same as retrieving (from a preference database) a preference number associated with each retrieved mapped address and selecting one of the retrieved mapped addresses based on the retrieved preference numbers, as taught in Applicants' invention. Furthermore, nowhere in Ahuja is there any teaching, showing, or suggestion of using preference numbers from a preference number database in order to select an address associated with a preferred content delivery server.

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added). The Ahuja reference fails to teach, show, or suggest the Applicants' invention as a whole.

More specifically, Ahuja teaches that "[e]ach client makes routing decisions based on the average response time of each server. These averages are estimated using the measured response times for the N most recent requests." (Ahuja, Column 5, Lines 39-42). In other words, since address selection in the Ahuja system is a function of the response times of the N most recent address requests, each selection of an address requires processing of the N most recent response times associated with each address that is available for selection.

Thus, introduction of preference numbers, as disclosed in Applicants' invention, to the Ahuja system simply produces a system in which address selection is performed according to preference numbers computed using the average response times of each server. In other words, the Ahuja system does not lend itself to use of preference numbers since as each new address selection request is received, the Ahuja system

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must recalculate the average response time associated with each server in order to update the associated preference numbers for use in address selection. As such, use of preference numbers in the Ahuja system actually introduces an additional level of processing required for performing address selection, thereby decreasing the efficiency of the Ahuja system.

Thus, Applicants respectfully disagree with Examiner's assertion that storage of preference numbers in the Ahuja system would simplify the server selection decision process by avoiding calculations for each server address selection decision. (Office Action, pg. 3, Item 5). The storage of preference numbers in the Ahuja system would still result in a system in which server selection is performed using average response times of the N most recent requests associated with each server. As such, performing average response time calculations for each server address selection is unavoidable in the Ahuja system, irrespective of the use and/or storage of preference numbers in the Ahuja system.

Furthermore, since computation of the preference number associated with an address must be performed for each response to an address request, storage of the preference numbers in the Ahuja system actually introduces additional overhead to the Ahuja address selection process. In other words, by storing continuously recomputed preference numbers in the Ahuja system, each response to an address request introduces at least one additional read/write operation. As such, storage of preference numbers in the Ahuja system actually increases the processing required for responding to address requests.

Therefore, since Ahuja teaches selecting an address according to the measured response times for the N most recent requests, Ahuja actually teaches away from using preference numbers (and an associated preference number database) for performing address selection. Furthermore, due to the corresponding decrease in efficiency of the Ahuja system as a result of the use of and storage of preference numbers, one skilled in the art would not be motivated to use the preference numbers of Applicants' invention in the Ahuja system.

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For prior art reference to be combined to render obvious a subsequent invention under 35 U.S.C. § 103, there must be something in the prior art as a whole which suggests the desirability, and thus the obviousness, of making the combination.

<u>Uniroyal v. Rudkin-Wiley</u>, 5 U.S.P.SQ.2d 1434, 1438 (Fed. Cir. 1988). The teachings of the references can be combined only if there is some suggestion or incentive in the prior art to do so. <u>In re Fine</u>, 5 U.S.P.SQ.2d 1596, 1599 (Fed. Cir. 1988). Hindsight is strictly forbidden. It is impermissible to use the claims as a framework to pick and choose among individual references to recreate the claimed invention <u>Id.</u> at 1600; <u>W.L. Gore Associates, Inc., v. Garlock, Inc.</u>, 220 U.S.P.Q. 303, 312 (Fed. Cir. 1983). Moreover, the mere fact that a prior art structure could be modified to produce the claimed invention would not have made the modification obvious unless the prior art suggested the desirability of the modification. <u>In re Fritch</u>, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992); <u>In re Gordon</u>, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

As such, Applicants submit that independent claims 19 and 26 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 20-25 and 27-31 depend directly or indirectly from independent claims 19 and 26 and recite additional limitations thereof. As such, and at least for the same reasons as discussed above, the Applicants submit that dependent claims 20-25 and 27-31 are also not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, the Applicants respectfully request that the Examiner's rejection be withdrawn.

#### **SECONDARY REFERENCES**

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the Office Action. Therefore, the Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this Office Action.

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# CONCLUSION

Thus, the Applicants submit that none of the claims presently in the application are obvious under the provisions of 35 U.S.C. §103. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone <u>Eamon J. Wall</u> at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

Dated: 2/21/05

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